

are covered by a projecting portion occupying a considerable part of the back of the carapace and raised above it; this projecting part is environed by a somewhat lyre-shaped wall, pinched in front on the sides and somewhat notched behind with two deep fossæ placed transversely and connected by a short canal, the base of which is smooth with only a few groups of warts.

The abdomen is very regular and complete for the group, and when additional specimens will admit of its being dissected, its structure promises to be curious; the various parts of it are hardly perceptible in the individual examined; a tolerably regular series of strange, close-placed appendages on its edges, seem, on cursory observation, very curious: there are about 12 deepish fossæ over it, the 2 deepest in the basal portion close to back part of carapace, and almost at right angles to the rest of abdomen, 3 on each side diverging into smaller fossulæ towards the edges, and four down the centre. The figures, drawn by Mr. Westwood from the specimen, before it came into Mr. Bell's possession, show as much as can be shown without injuring the rare example.

I exhibited a drawing of this crab at a meeting of the Linnean Society some two years ago, and not having the specimen by me, concluded, as Mr. Westwood's drawing showed it, that there were no visible traces of the imperfectly developed leg-appendages, so prominent in some species of *Lithodes*. A subsequent examination of the specimen kindly sent me by Prof. Bell has shown me I was mistaken; and on removing the carapace, which Mr. Westwood did, they are to be seen concealed as represented in the figure. There is, however, no outward opening.

This fine species is named *Lithodes (Petalocerus) Bellianus* in compliment to the ablest of our British carcinologists, the learned and scientific President of the Linnean Society, Professor Thomas Bell; in whose fine collection it is preserved. It is to him I am indebted for the loan of the specimen.

The plate represents—

1. *Lithodes (Petalocerus) Bellianus*, of the natural size, viewed from above.
2. The same from beneath, showing the pitted abdomen.
3. Rough sketch of carapace in profile.
4. Profile view of rostrum, with eyes, antennæ, &c.
5. Outer antennæ with petaloid processes.
6. Inner antennæ.
7. Hind pair of legs, concealed under the carapace.
8. Jaw feet.

May 27, 1856.

Dr. Gray, F.R.S., in the Chair.

Mr. Gould brought under the notice of the Meeting a portion of the Birds collected by Mr. John MacGillivray, the naturalist at-

tached to H.M. Surveying ship Rattlesnake, and lately sent home by Capt. Denham, the Commander of the Expedition. They were obtained on the Fijis, San Cristoval, Isle of Pines, and other islands.

Perhaps the most remarkable of these birds is a species of *Centropus*, which exceeds in size every other member of the genus Mr. Gould has yet seen. The single specimen sent home is not fully adult, as is evidenced by some freshly moulted feathers of the tail and wings differing in colour from the older ones. On account of its large and robust form, Mr. Gould proposes to call this species

CENTROPUS MILO.

Head, neck, mantle and breast tawny-white, remainder of the plumage mottled brown and green; some of the feathers being brown indistinctly banded with green, while others are entirely green, the mottled hue being that of immaturity, and the green the adult livery: bill black.

Total length, $26\frac{1}{2}$ inches; bill, $2\frac{1}{2}$ inches long by $1\frac{1}{2}$ deep at the base; wing, $10\frac{3}{4}$; tail, $14\frac{1}{2}$; tarsi, 3.

Hab. Guadalcanar Island.

Remark.—The specimen is a male. Unlike the other members of the genus, this species has bare orbits, with the colouring of which Mr. Gould is not acquainted.

For a fine species of Fruit-eating Pigeon from the Isle of Pines, Mr. Gould proposed the name of

IANTHÆNAS HYPÆNOCHROA.

Head, neck, breast, and under surface vinaceous brown, with glossy purple reflexions on the back of the neck, and a slight gloss of the same hue on the sides of the neck and breast; chin, sides of the face and throat white; all the upper surface, wings and tail dark slate grey, the margins of the wing-coverts and the feathers of the back and upper tail-coverts glossed with bronzy green; bill scarlet at the base, yellow at the tip; orbits naked and scarlet; feet reddish flesh colour.

Total length, 16 inches; bill, $1\frac{1}{8}$; wing, $9\frac{1}{4}$; tail, 7; tarsi, 1.

Hab. Isle of Pines.

Remark.—This is a fine species, about the size of the common Pigeon of Europe. It pertains to the subgenus *Ianthænas*, the members of which are very nearly allied to the birds constituting the genus *Carpophaga*.

Another pigeon from the same locality was named

TURACÆNA CRASSIROSTRIS.

Head, all the upper surface, wings and tail dark slaty black, the feathers of the back margined with a deeper black; a broad band of grey across the lateral tail feathers near the base, and the outer feather on each side tipped with darker grey; throat greyish white; under surface sooty, washed with grey on the sides of the neck, the breast and centre of the abdomen.

Total length, $14\frac{1}{2}$ inches; bill, $1\frac{1}{8}$; wing, $7\frac{3}{4}$; tail, $7\frac{1}{2}$; tarsi, 1.

Hab. Guadalcanar Island.

Remark.—This is a smaller bird than the Australian *Macropygia phasianella*, has a much thicker bill, and a shorter tail, which organ is moreover of a graduated form.

A fine Lory from San Cristoval was named

LORIUS CHLOROCERCUS.

Head, nape, and a patch on each side the neck black; plumage of the whole of the body fine scarlet, with a broad crescentic mark of rich yellow across the breast; tip of the shoulder silvery blue; wing-coverts yellowish green; outer webs of the primaries and secondaries dark grass-green; inner webs dull black, with a broad oblong mark of scarlet along their basal portions; basal half of the tail scarlet, the remainder grass-green; under wing-coverts and thighs fine blue; bill orange; feet dark brown.

Total length, 10 inches; bill, $\frac{7}{8}$; wing, $6\frac{5}{8}$; tail, $4\frac{1}{4}$; tarsi, $\frac{3}{4}$.

Hab. San Cristoval.

Remark.—This is one of the most beautiful species of the genus, and differs from all its congeners in having the apical half of the tail green.

A new *Hirundo* from Moala, one of the Feejee Islands, was characterized as

HIRUNDO SUBFUSCA.

Forehead, chin and throat rufous; crown of the head, all the upper surface, wing- and tail-coverts steel black; wings and tail dark brown; under surface of the body and under wing-coverts dark fuscous; under tail-coverts steel black, margined with light brown.

Total length, 5 inches; bill, $\frac{1}{2}$; wing, $4\frac{1}{4}$; tail, 2; tarsi, $\frac{1}{2}$.

Remark.—This is a very remarkable Swallow, resembling in the colouring of its back, throat and forehead the common Swallow of Europe; it is also very similar in size, while it has a much larger bill and a very diminutive and but slightly forked tail, the outer feathers not being produced as in the European bird.

The five birds above described are now deposited in the collection at the British Museum.

Mr. Gould also described a new and very beautiful Pigeon from the Solomon Islands as

IOTRERON EUGENIÆ.

Crown of the head, cheeks, upper part of the throat and ear-coverts white; centre of the throat and chest of the richest crimson; upper surface and wings green washed with orange; along the shoulder a mark of light grey, and a large spot of grey near the tip of each of the tertiaries; primaries dark slate grey tipped with orange-brown; secondaries slate grey bordered with orange-brown, and with a very narrow edge of yellow along the apical portion of

the external web ; under surface of the body greyish green ; under surface of the wings grey ; vent washed with yellow.

Total length, about 8 inches ; bill, $\frac{3}{4}$; wing, $4\frac{1}{2}$; tarsi, $\frac{5}{8}$.

Hab. The Solomon Islands.

Remark.—The only specimen I have ever seen, and which is unfortunately imperfect, being destitute of tail, was sent to me by Mr. Webster, who had visited the above islands. This beautiful little Pigeon, certainly the most brilliantly coloured of the entire group, has been named in honour of Her Imperial Majesty the Empress of the French.

2. LIST OF MAMMALS AND BIRDS COLLECTED BY MR. BRIDGES IN THE VICINITY OF THE TOWN OF DAVID IN THE PROVINCE OF CHIRIQUI IN THE STATE OF PANAMA. BY PHILIP LUTLEY SCLATER, M.A.

The town of David lies in a beautiful plain on the left bank of the river of the same name, about twenty-five miles above its exit into the Pacific at Boca Chica. On the west of the town rises the extinct volcano of Chiriqui, a peak 9000 feet in altitude, and on the north the Sierra de Chorcha, a flat table-mountain, which here forms the watershed between the two oceans.

Mr. Bridges arrived at David in the month of January in the present year, and stayed there until the middle of the following March. He was principally engaged in collecting the magnificent Orchids of that country, of which he succeeded in obtaining a considerable series. During his leisure moments, however, he procured about fifty species of Mammalia and birds, of which a list is subjoined. These were principally collected near the town on the banks of the river, or between that and the '*Boqueti*,'—an elevated savannah of about 4000 feet above the sea-level, lying on the western slope of the volcano of Chiriqui.

This locality is very interesting to naturalists, being a stage in the passage between North American and South American zoology, which has not, as far as I am aware, been hitherto much explored. M. Warszewiz, the well-known Polish collector, was resident in David some time in 1849, but did not turn his attention much to birds except *Trochilidæ*, of which he discovered the six very interesting new species which were described by Mr. Gould before this Society in 1850.

Mr. Bridges has very greatly added to the value of my list by supplying me with notes upon the exact spot in which he found each species and upon what he recollected of their habits.

The nearest Bird-fauna to the present of which any detailed accounts have been published are those of Nicaragua, as given by Prince Bonaparte in his catalogue of the Birds brought from that country by Delattre in the *Comptes Rendus* of the Academy of Paris for 1854, and of the interior of New Granada, as shown by my List

of Birds received in collections from Bogota read before this Society last year. To both of these papers I have frequently referred in the following list in order to show the geographic range of the species, and to avoid the repetition of synonymy already given.

MAMMALIA.

1. *SAIMARIS SCIUREA* (Linn.)?

Forests near David. A skeleton only of an animal probably of this species.

2. *SCIURUS* ——— ?

A black species, difficult to distinguish. Mr. Bridges states that it is common in the immediate vicinity of the town of David, and between that and the port of Boca Chica.

3. *SCIURUS ÆSTUANS*, Linn.

This seems to agree with Bogota specimens so marked in the British Museum. It is from the Boqueti at the base of the volcano of Chiriqui.

4. *CYCLOTHURUS DIDACTYLUS* (Linn.).

From the vicinity of David. Also seen near Panama. A strictly nocturnal animal.

5. *CHOLÆPUS DIDACTYLUS*.

From the forests near David. I believe neither this Sloth nor the Little Anteater has been hitherto observed so far north.

AVES.

1. *PHAROMACRUS MOCINNO*, De la Llave!—*Trogon resplendens*, Gould, Mon. Trog. pl. 21.

From the dense forest on the Boqueti; only three specimens seen.

2. *TROGON AURANTIIVENTRIS*, Gould, sp. nov. See *antea*, p. 107.

Inhabits the same locality as the preceding, and is more common. Also found farther down towards David.

3. *MOMOTUS LESSONI*, Lesson, Icon. Orn. pl. 62.

Agrees with Guatimala specimens. From the vicinity of David in the thickets. Stops during the day in the shady underwood, and seeks its food towards evening in the open spaces on the banks of the river.

4. *CERYLE AMERICANA* (Gm.)—P. Z. S. 1855, p. 136.

On the banks of the river David. Its habits are the same as those of our Kingfisher. Mr. Bridges also observed a large species more common than this, probably *C. torquata*.

5. *GALBULA MELANOGENIA*, Sclater, Cont. Orn. 1852, p. 61 et 93, pl. 90.

On the banks of the river David, rather uncommon, only three or four times observed.

6. *CAMPYLOPTERUS CUVIERI*.—*Trochilus cuvieri*, Delattre et Bourc. R. Z. 1846, p. 310.

7. *HELIOMASTER LONGIROSTRIS* (Vieill.).—Gould, Mon. Troch. pt. 5, pl. 9.

8. *LAMPORNIS VERAGUENSIS*, Gould.

These three Humming-birds are found in the outskirts of the town of David, feeding among the flowers of a large arborescent species of *Erythrina*.

9. *AMAZILIUS RIEFFERI* (Bourc.), R. Z. 1843, p. 103.

Found feeding on a malvaceous plant near the Boqueti, at an elevation of 4000 feet.

10. *SAUCEROTTIA NIVEIVENTRIS* (Gould), P. Z. S. 1850, p. 164.

11. *SAUCEROTTIA ATALA* (Less.).—Bp. Consp. p. 77.

12. *HYLOCHARIS* (?) *CÆRULEIGULARIS* (Gould), P. Z. S. 1850, p. 163.

All these three short-billed species are found in the very town of David feeding on the *Tamarindus indicus* and orange-trees. They are very pugnacious and constantly fighting together. Besides the seven Humming-birds here given, Mr. Bridges observed three others of which he did not obtain specimens. One of these (probably *Heliomaster constantii*) was feeding on a beautiful blue species of *Salvia* on the Boqueti.

13. *CÆREBA CYANEA* (Linn.).

Already noticed as far north as Nicaragua (Bp. Notes s. l. Ois. Coll. Delattre, p. 50), and lately brought by M. Sallé from the vicinity of Cordova in Mexico.

14. *PICOLAPTES* — ?

Vicinity of the town of David on the large forest-trees, with the habits of our Creepers.

15. *THRYOTHORUS RUFALBUS*, Lafr. R. Z. 1845, p. 337 ; P. Z. S. 1855, p. 143.

In the dense jungle near David.

16. *RHODINOCICHLA ROSEA* (Less.), P. Z. S. 1855, p. 141.

Mr. Bridges only procured one specimen of this singular bird—a male. It was hopping about in the thicket close to the ground in the flat land between the rivers David and Chiriqui, uttering a very peculiar note, by which his attention was called to it.

17. *MNIOTILTA VARIA* (Linn.).

A North American species, ranging as far south as Bogota (P. Z. S. 1855, p. 143). Mr. Bridges says it has the habits of our Creeper,

running up the trunks of the trees and searching for insects in the bark. He found it in the town of David.

18. RHIMAMPHUS ÆSTIVUS (L.), juv.

Mr. Bridges found this bird not uncommon in the town of David in the fruit-trees and *Erythrinæ*.

19. TYRANNUS MELANCHOLICUS, Vieill. P. Z. S. 1855, p. 150.
Margins of the plains near David, very common.

20. MILVULUS TYRANNUS (Linn.).—“*Tijerita*.”

Ranges from the Southern United States as far south as Bogota (P. Z. S. 1855, p. 150). Very common in the plains near David.

21. TODIROSTRUM CINEREUM (Linn.).

See my remarks on the range of this species, P. Z. S. 1855, p. 148.
Mr. Bridges found it amongst the trees in the vicinity of David.

22. TYRANNULUS ELATUS (Spix).—P. Z. S. 1855, p. 150.

On the trees in the vicinity of David.

23. TITYRA MEXICANA (Less.).—*Psaris mexicana*, Less. R. Z. 1839, p. 41, et *P. tityroides*, Less. R. Z. 1842, p. 41.

I consider this bird probably distinct from *Tityra semifasciata* of Bolivia and East Peru, to which it is generally united. It has all the rectrices banded across with black; while the other, speaking from the specimens I have seen of it, has the inner web of the outer pair of tail-feathers white. Delattre procured this bird in Nicaragua (Bp. Notes Orn. p. 88); M. Sallé has lately brought specimens from Cordova in Mexico; Mr. Bridges' examples are from the forests on the Boqueti.

24. CHIROXIPHIA MELANOCEPHALA (Vieill.). See P. Z. S. 1855, p. 151.

In the bushes on the margins of the rivers near David.

25. THAMNOPHILUS DOLIATUS?

26. THAMNOPHILUS BRIDGESI, sp. nov.

T. fumoso-brunneus: capite nigro, plumarum rachidibus albis: alarum tectricibus nigris maculis apicalibus rotundis albis: remigibus et rectricibus fumoso-nigricantibus, harum trium utrinque extimarum apicibus nigro marginatis; illarum marginibus externis brunnescentibus: gula et pectore toto ad summum ventrem nigricantibus, longitudinaliter albo striatis: tectricibus subalaribus albis.

Long. tota 6·7, alæ 2·8, caudæ 2·5.

This is a typical *Thamnophilus* not very closely allied to any described species, but to be placed near *nigrocinereus*, *maculipennis*, &c. (vide Edinb. Phil. Journ. n. s. 1855, i. p. 226 et seq.). Mr. Bridges found these two Bushshrikes in the thick bush on the margins of the river David. The first species was very common, but of the present only one individual was seen.

27. *THAMNOPHILUS MELANURUS*, Gould?

A female specimen, probably referable to the New Grenadian species.

28. *STURNELLA LUDOVICIANA* (Linn.)?

"*Pazaro Savanero*." Amongst the grass on the plain near David. Very tame, and when disturbed does not fly far, but runs much.

29. *YPHANTES BALTIMORENSIS* (Linn.).—Bp. Consp. p. 432.

Already noticed as far south as Real del Monte in Mexico by Bullock (Sw. Phil. Mag. 1827, p. 436), and Guatemala by Prince Bonaparte (P. Z. S. 1837, p. 116).

30. *SALTATOR MAGNOIDES*, Lafr.

31. *RAMPHOCELUS DIMIDIATUS*, Lafr. Mag. de Zool. Ois. pl. 81 (1837).

32. *RAMPHOCELUS PASSERINII*, Bp.

Both these *Ramphoceli* are tolerably common, and generally met with together in the bushy underwood on the margins of the rivers. They feed on the fruit of a small species of *Ficus*. They are always seen near the water.

33. *PYRANGA ÆSTIVA* (Linn.), P. Z. S. 1855, p. 156.

"*Sangue del Toro*." Not uncommonly met with near the Boqueti on the tops of the trees.

34. *TANAGRA DIACONUS*, Less.

"*Azulejo*." The commonest bird in the country. Very abundant in the town of David.

35. *CALLISTE GYROLOIDES* (Lafr.).

This is a wide-ranging species, extending hence to the head-waters of the Amazon in Bolivia, where specimens were obtained by d'Orbigny, that is, from 8' north latitude to 18' south latitude.

Mr. Bridges says it was not common at David. It is found on the high trees near the town, and feeds on the fruit of the small-fruited *Ficus*.

36. *CALLISTE FRANCISCÆ* (Lafr.).—*Aglaiä fanny* (!), Lafr. R. Z. 1847, p. 72; Des Murs, Icon. Orn. pl. 56, fig. 1.

This species appears distinct from *Calliste larvata* of Du Bus, to which it is usually united. The general colouring is pretty much the same, but the tints are still brighter in the present bird, and the head in particular is paler.

Mr. Bridges obtained a single specimen only of this beautiful Tanager, from the tops of the high trees on the banks of the river David.

37. *EUSPIZA AMERICANA* (Linn.).

Already noticed as far south as Nicaragua, and lately received by MM. Verreaux of Paris from S. Martha on the north coast of New Granada. Found in small flocks near David.

38. *EMBERNAGRA CONIROSTRIS* (Bp.).—*Arremon! conirostris*, Bp. Consp. p. 488. — *Embernagra striaticeps*, Lafr. R. Z. 1853, p. 62; P. Z. S. 1855, p. 154.

I consider M. de Lafresnaye is quite right in placing this bird in the genus *Embernagra*. It is, at least, certainly no *Arremon*. It is found, like the last bird, in small flocks near David, feeding on the grass-seeds in the savannahs.

39. *MELANERPES FORMICIVORUS* (Sw.).

Agrees with Mexican specimens. Not rare in the forests of the 'Boqueti,' found on the evergreen *Quercus*.

40. *CENTURUS SUBELEGANS*, Bp. P. Z. S. 1837, p. 109; Consp. p. 121; P. Z. S. 1855, p. 162.

Seems to agree with Bogota and Venezuelan specimens.

41. *CHLORONERPES CECILII* (Malherbe)?

Both these Woodpeckers are found on the trees in the outskirts of the town of David. The first is the more common, only one pair of the latter having been observed.

42. *GEOTRYGON CHIRIQUENSIS*, sp. nov.

G. pure castanescenti-brunneus: dorso medio purpurascens: pileo cærulescenti-griseo: subtus dilutior, abdomine albescens: mento gulaque lactescenti-albis, rufescente tinctis: remigibus et rectricibus nigricanti-schistaceis: caudæ apice brunnescentiore: rostro nigro: pedibus rubris.

Long. tota 11.0, alæ 5.9, caudæ 3.5.

Both Prince Bonaparte and Mr. G. R. Gray, who have lately paid great attention to the *Columbæ*, consider this species as new to science, and it is upon their authority rather than my own that I have ventured to name it as undescribed.

43. *CHLORÆNAS RUFINA* (Temm.).—Bp. Consp. ii. p. 52.

From the dense forests of the Boqueti at the base of the volcano.

44. *ODONTOPHORUS VERAGUENSIS*, Gould, *antea*, p. 107.

From the Boqueti, where it is found in coveys running on the ground in the forests. The males have a peculiar call-cry.

45. *ARAMIDES CAYENNENSIS* (Gm.) (Pl. Enl. 352).

In the bush on the banks of the river David.

46. *PARRA HYPOMELÆNA*, G. R. Gray, juv. ?

Found in the shallow waters running amongst the stones.

A young bird, white underneath, probably of *P. hypomelæna*, but it would be hazardous to decide positively without seeing adult specimens from the same locality.

3. NOTE ON SOME BIRDS FROM THE ISLAND OF ASCENSION.
By PHILIP LUTLEY SCLATER, M.A.

Dr. Acland, of Oxford, having lately placed in my hands, for naming, a small collection of birds from the Island of Ascension, I think it will be useful to record a list of them, although none of them are of great rarity, in order to make some contribution, however small, towards a more accurate knowledge of the geographic range of species.

Mr. Darwin (Zool. Beagle, p. 133) tells us that there are no aboriginal land-birds on this island. The only bird he mentions, which might claim that name, is a *Porphyrio* (*P. simplex*, Gould), which however, we are informed, was evidently a straggler not long arrived.

But recollecting the beautiful Thrush (*Nesocichla eremita*) lately described by Mr. Gould from the Island of Tristan d'Acunha, there is certainly no *primâ facie* reason why the Island of Ascension should not also possess peculiar land birds.

The specimens in Dr. Acland's collection are all *Natatores*, belonging to the following species.

1. *ONYCHOPRION FULIGINOSUS* (Gm.).

Latham (G. H. x. 102) has recorded the existence of this Tern upon the island in "*prodigious numbers*." It is found also on the American coasts from Texas to the Floridas.

2. *PHAETHON ÆTHEREUS*, Linn. (Pl. Enl. 998).

Visits Tobago, whence Sir William Jardine received the eggs of this species from his correspondent Mr. Kirk. See Cont. to Orn. 1852, p. 351, pl. 84, where the eggs of all three species of *Phaethon* are figured.

3. *PHAETHON FLAVIROSTRIS*, Brandt (Pl. Enl. 369). *P. æthereus*, Audub. nec Linn.

Mr. G. R. Gray has rejected Brandt's excellent appellation for this species in favour of Brisson's *candidus*. But Brisson was no binomialist, and has no claim to bestow *specific* names in a *binominal system*. This *Phaethon* breeds on the Bermudas (Cont. Orn. l. c.), and visits the coast of Florida (Audubon).

Professor Brandt has written a good Monograph of the *Phaëthon-tinæ* in the Transactions of the St. Petersburg Academy. These two species, and the *P. phœnicurus* from the Indian Ocean, appear to be the only three well-distinguished birds of the genus.

4. *TACHYPETES AQUILA* (L.).

This name ought, I think, to be retained for the Atlantic bird. Mr. Gould has described and figured a smaller species from Australia; but he has also a larger bird from the coasts of that country, which appears different from the present.

5. *SULA FUSCA*, Vieill. Gal. Ois. pl. 277; Gould, B. Aust. vii. pl. 78.

6. *SULA PISCATRIX* (L.); Gould, B. Aust. vii. pl. 79.

Besides these two Gannets I am acquainted with five other apparently well-distinguished species, viz. *S. bassana* of Europe, *S. capensis* of S. Africa, *S. australis* and *S. cyanops* of the Australian seas, and *S. variegata* of the Pacific coast of S. America.

4. NOTE SUR UN NOUVEAU GENRE DES OISEAUX DE PROIE.
PAR JULES VERREAUX.

Genre URUBITORNIS, Verreaux.

Bec beaucoup plus haut que large; très comprimé; légèrement sinueux sur le bord, qui est un peu rentré vers la base; à courbure très sensible et à pointe longue et acérée; angle du bec atteignant à peine le niveau de la partie antérieure de l'œil: cire large et lisse, à narines rondes et percées en avant; face en partie dénudée et garnie çà et là de poils noirs: tarsi assez longs, robustes, et fortement reticulés, excepté sur la partie postérieure où se trouvent des larges plaques au nombre de neuf; quatre à cinq scutelles sur les doigts, dont l'interne est le plus fort, le médian plus long que l'externe qui est le plus court de tous; le pouce également robuste et armé d'un ongle au moins aussi fort que l'interne.

Ailes longues, amples, dépassant la queue de plus d'un pouce, à 3^{me} et 4^{me} rémiges les plus longues; toutes les primaires échancrées sur leurs barbes internes. Queue moyenne, carrée et légèrement échancrée au centre, composée de 12 rectrices, barrée transversalement comme dans les vrais *Urubitingæ*.

Dans son ensemble, le genre tient des derniers par la coloration et par la bande transversale de la queue, mais il s'en distingue sous d'autres rapports indiqués ci-dessus. Les tarsi surtout ne permettront jamais de le confondre. Sa taille est aussi beaucoup plus forte. Il semble tenir le milieu entre le genre *Harpyhaliaëtus* et *Urubitinga*.

A ne considérer que le plumage du jeune de cet oiseau, on le prendrait pour celui du *Geronoaëtus aquia*, tout il y a de rapport, voire même dans la queue qui ne laisse voir aucune trace de bande transversale, mais qui a la même motelure comme dans les jeunes des *Urubingas*.

Nous ne sommes donc pas étonnés que Tschudi ait fait de cet oiseau un *Circaëtus* en égard à ces tarsi, et que d'autres auteurs en aient fait un *Urubitinga* en ne considérant que la couleur. Nous pensons donc que la place que nous lui assignons est plus naturelle en ce qu'elle lie les deux genres qui ont tant de similitude entre eux.

Sp. typ. et unica URUBITORNIS SOLITARIA.

Circaëtus solitarius, Tsch. Av. Consp. no. 14; Faun. Per. p. 94, t. 11.—Gray's Gen. p. 13, sp. 6.—Lafr. R. Z. 1849, p. 101.

♂ adulte. Couleur générale, noir-plombé, excepté sur la tête, l'extrémité des rémiges et les rectrices, qui sont d'un noir plus décidé; une large bande blanche traverse la queue, qui est également ter-

No. CCCX.—PROCEEDINGS OF THE ZOOLOGICAL SOCIETY.

minée d'un ruban étroit de même couleur ; on remarque sur les couvertures, tant supérieurs qu'inférieurs, des traces de bandes blanches au centre de quelques plumes, ainsi que quelques bordures vers leur extrémité. Les barbes des rémiges primaires et secondaires ont comme des raies mal accusées d'une teinte plus noire, et qui paraissent d'avantage en écartant les plumes : elles sont chinées et laissent voir çà et là, quelques teintes brun-roussâtre de la livrée précédente.

Longueur totale 70 cent.

♀ d'une année plus jeune. La coloration noire plus lavée de brun que de plombé, laissant voir çà et là quelques parties fauves, surtout sur le cou ; la bande médiane de la queue chinée de cendré, et la petite qui la termine plus étroite et d'un blanc moins pur que dans le précédent ; taille un peu moindre.

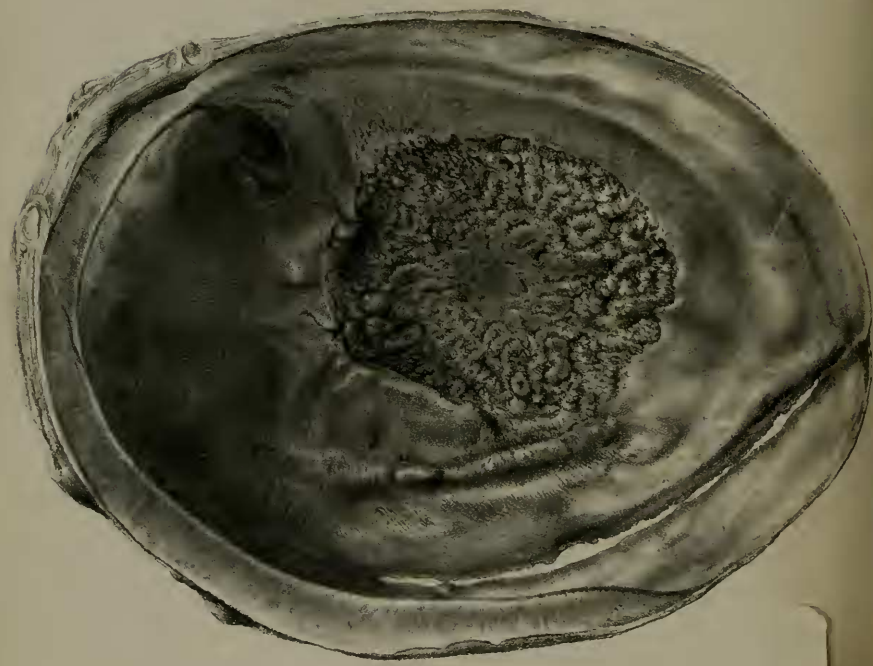
Tschudi dit que l'iris est d'un brun très foncé ; que la cire, la peau nue de la face et les tarses sont jaunes, le bec d'un brun-noirâtre, et les ongles d'un brun-grisâtre sombre.

Jeune ♀ dans sa 3^{me} année. Partie supérieure brune, plus ou moins parsemée de plumes plus foncées et bordées de roussâtre ; tête et cou d'un roussâtre plus ou moins fauve ; dessus et occiput à plumes brun-noirâtre très légèrement bordées de roussâtre ; des lignes longitudinales plus ou moins larges sur le cou et ses côtes ; une bande brune prenant du dessus de l'œil, passant en arrière et descendant sur les parties latérales du cou : gorge et joues d'un fauve clair avec des lignes étroites et brunes au centre des plumes, devenant plus larges sur le haut du cou ; poitrine brun-noirâtre, les plumes plus ou moins bordées de roussâtre et toutes de cette couleur à leur base, reste des parties inférieures d'un roussâtre plus ou moins vif avec des taches plus ou moins larges, sur les parties latérales surtout. Cuisses brunes avec des bordures rousses peu visibles à l'extrémité des plumes, mais comme rayées de fauve sur la partie cachée de chaque plume. Couvertures sous-caudales comme la poitrine avec des raies plus ou moins bien marquées de brun-noirâtre ; les supérieures de même, mais plus brunes. Queue brune avec une légère teinte grise et chinée comme dans le jeune *aguia*, d'une teinte blanchâtre en dessous avec les taches brunes plus multipliées ; ailes brunes, les plus grandes couvertures chinées de fauve. Rémiges brunes, les primaires noires sur la majeure partie de leur longueur, quelques unes de ces dernières les plus courtes terminées de blanchâtre ; couvertures inférieures roussâtres variées de brun-noirâtre ; dessous des rémiges fauve à partir de leur base jusqu'au trois quart de leur longueur, tachées çà et là de brun et chinées sur le reste. Même grandeur que les précédents.

Nous avons reçus cet oiseau de S^{te} Marthe, Nouvelle Grenade, en 1843. Notre voyageur marque qu'il fréquente les grand bois, où il chasse les moyens mammifères et les oiseaux, voire même les Hocos. Son naturel est farouche et d'une méfiance extrême.

“Mr. Bridges que j'ai vu il y a peu de jours m'a affirmé avoir rencontré ce même oiseau (*Urubitornis solitarius*) en Bolivie dans la province de Moxos par les 20° Sud le long de la rivière Urumose. C'est donc une localité nouvelle à ajouter à l'habitat de cet oiseau.”





HALIOTIS ALBICANS Var

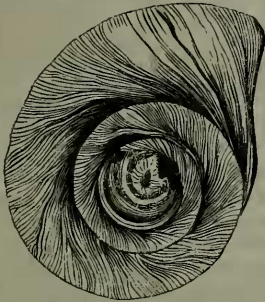
G.H. Ford

W. W.

5. ON THE NUCLEUS OF THE OPERCULUM OF *CYCLOSTOMA ELEGANS*. BY JOHN EDWARD GRAY, PH.D., F.R.S.

In my various physiological papers I have attempted to establish the fact that the opercula of shells are analogous to the second valve of a bivalve shell, and are in fact a counterpart of the other valve. I have shown that they are formed at the same time on the body of the Mollusca; that they have a peculiar mantle, similar to the mantle of the spiral shell, and that they are increased in size in the same manner.

On lately examining the operculum of *Cyclostoma elegans*, I was struck with the fact (which might have been foreseen when the first formation is considered) that they have a somewhat irregular nucleus or first-formed part, like the nucleus to be observed on the apex of the spire of most univalve shells, as shown in the accompanying figure, drawn and engraved by Miss Jessie Dunlop.



I may further observe, that the operculum of this shell is formed of two shelly plates, separated from each other by arched laminae concentric with the outer edge of the last whorl, placed under the concentric grooves of growth on the outer and inner surface, leaving a series of pores on the circumference in the groove between the two plates.

6. ON A MONSTROSITY OF *HALIOTIS (ALBICANS?)*.
BY JOHN EDWARD GRAY, PH.D., F.R.S., P.B.S., ETC.

(Mollusca, Pl. XXXIV.)

Mr. Cuming kindly showed to me a series of four specimens of Ear-shells, which he procured in Paris, and of which he has some other examples.

The four specimens are all peculiar for having an elongated continued slit occupying the place where the series of perforations are usually situated,—this slit extending more than one-third of the length of the spiral ridges on the outer or left side of the whorls;

but it does not extend to the margin of the shell, and there is generally a more or less deep pit on the inner surface, in front of its extremity.

When I first saw the shell, I was inclined to regard it as a monstrosity; but when I considered the uniformity of the peculiarity in the specimens which I possess, and in those which Mr. Cuming had seen, I thought that it might be the type of a new form, for which *Schismotis excisa* would be a good name.

But a comparison of the shell with the specimens of *Haliotis albicans* in the British Museum from Van Diemen's Land, has induced me to believe that they are only varieties of that or some very nearly allied species, and that the peculiarity of their structure is produced by the locality they inhabit, the absence of the shelly matter on the branchial ridge being probably produced by the continued abrasions to which the shells have evidently been exposed, either by some chemical peculiarities in the water or the attack of parasitic animals.

All the specimens are in a very eroded condition, and two of them are very much pierced with a minute worm, and they all have the under valve of a *Hipponyx* attached on the left side near the circumference of the shell; one of these shells (which is generally the largest of the series) being placed in front of the slit between its termination and the front margin of the shell, covering the space which in the normal shell would be the place of one or two perforations.

If the exterior surface of a good specimen of *Haliotis albicans* is examined, it will be found that there exists a distinct narrow straight groove continued from one perforation to the other, and to the margins of the outer lip, which I have not seen so distinctly marked in any other species of the genus, indicating probably the suture between the overlapping of the two sides of the slit in the mantle of the animal, and this suture is marked but by a slight line on the inner surface of the shell. The same suture is to be observed in most other *Haliotidæ*, but they are generally not so distinct as in *H. albicans*, and much more sinuous.

I am inclined to believe that the slit in the specimens is to be considered as the imperfect filling-up of the shelly matter between the usual perforations, caused by the eroded and evidently diseased state of the specimens.

The interior of the shells is marked with a very rough tubercular muscular scar, which is not to be observed in perfect specimens of *Haliotis albicans*; but this will be found to be uniformly the case with most specimens of Ear-shells which have an eroded or worm-eaten outer surface, even in species which have a scarcely marked scar in their perfect or normal condition; so that this difference, like the slit, appears to depend on the state of the shells and the animal which formed it.

The interior of the shell presents a further peculiarity, but this is evidently caused by the same effects as the roughness of the muscular scar and slit on the branchial ridge, viz. there is a more or less deep broad groove on the inner surface between the slit and the sub-